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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/830,225	04/23/2001	Thomas Riegel	P01,0029	3045

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STAAS & HALSEY LLP
SUITE 700
1201 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

EXAMINER

SUKHAPHADHANA, CHRISTOPHER T

ART UNIT	PAPER NUMBER
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2625

DATE MAILED: 07/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/830,225

Applicant(s)

RIEDEL, THOMAS

Examiner

Christopher T. Sukhaphadhana

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 April 2001.
- 2a) ☐ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☒ Claim(s) 1-28 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 April 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This application is in condition for allowance except for the formal matters detailed in the remainder of this action.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

Drawings

2. The drawings are objected to because the replacement drawings submitted have a **line of noise** running through them. Furthermore, many of the drawings contain **handwritten notation**. Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the

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examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. **Figures 1, 3, 4, 7, and 8** should be designated by a legend such as --Prior Art-- or --Related Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference character(s) mentioned in the description: "transmitted image information 822" on page 6, line 17, "quantization indices 816" on page 6, line 20, "image block 820" on page 6, line 22, "Cartesian coordinate system 610" on page 22, line 10, and "upper left corner 611" on page 22, lines 10-11. Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

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5. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "823" has been used to designate both "image blocks" on page 5, line 23, and "macro block" on page 6, line 23. Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

6. The disclosure is objected to because of the following informalities:

Consider replacing "C" on page 22, line 1 with $--C_y--$.

Consider replacing " $n_L = 0$ " on page 22, line 3, with $--n_L = 0--$.

Consider replacing " (A_x, A_y) , (C_x, C_y) and (D_x, D_y) " on page 22, line 5, with $--(A_x, A_y)$, (C_x, C_y) and $(D_x, D_y)--$. (characters not subscripted)

Consider replacing " (A_x, A_y) , C_x, C_y and (B_x, B_y) " on page 22, line 5, with $--(A_x, A_y)$, (C_x, C_y) and $(B_x, B_y)--$. (missing parenthesis)

Consider replacing "Z/B" and "Z/H" with $--B/Z--$ and $--H/Z--$, respectively, in the formulas at the bottom of page 21. (Z/B and Z/H produce fractions, while B/Z and H/Z can produce integers)

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Consider replacing the coordinates on page 22, line 2, with $--(A_x, A_y), (B_x, B_y)$ and $(D_x, D_y)--$. (Examiner believes these would be the correct coordinates for the upper left corner)

Consider replacing the coordinates on page 22, line 5, with $--(B_x, B_y), (C_x, C_y)$ and $(D_x, D_y)--$. (Examiner believes these would be the correct coordinates for the lower right corner)

Appropriate correction is required.

Claim Objections

7. **Claims 1, 25, and 29** are objected to because of the following informalities:

In **claim 1**, consider replacing "image is at" on line 3 with $--image\ at--$.

In **claim 25**, consider replacing "an inverse" in line 1 with $--a--$.

In **claim 29**, consider replacing "claim 1" in line 1 with $--claim\ 4--$.

Appropriate correction is required.

Allowable Subject Matter

8. **Claims 1-30** would be allowed once corrected for formal matters presented above and would be renumbered to group depending claims.

9. The following is an examiner's statement of reasons for indication of allowable subject matter: In regards to independent **claims 1 and 20**, none of the prior art of record teaches or fairly suggests at least implementing processing of the image such that a first value and a second value and a third value are respectively allocated to at least one image sub-block, the first value and the second value describe the relative position of the appertaining image block with respect to the image and the third value describes the relative position of the appertaining image sub-

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block with respect to the appertaining image block (as recited in claim 1, and similarly in claim 20), in combination with the other limitations. The closest prior art of record, Szeliski et al (U.S. Patent 5,987,164) discloses the other limitations of the claim (Fig 31) and implementing processing of the image such that a first value and a second value and a third value are respectively allocated to at least one image sub-block (u_i , col 28, line 57), the first value and the second value describe the relative position of the appertaining image block with respect to the image (u_i is a vector locating one of the three triangle vertices in u, v coordinates, col 28, line 57). Szeliski does not teach or fairly suggest the limitation as claimed. **Claims 2-19 and 21-30** contain allowable subject matter at least by dependency on claim 1 or 20.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

10. As allowable subject matter has been indicated, applicant's reply must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).

Conclusion

11. This application is in condition for allowance except for the formal matters presented above.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

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A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher T. Sukhaphadhana whose telephone number is (703) 306-4148. The examiner can normally be reached on 9a-5p M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh M. Mehta can be reached on (703) 308-5246. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CTS



**BHAVESH M. MEHTA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600**